

# PROPOSED AMENDMENTS by Special Group Occupancy Work Group

## CHAPTER 7

**707.14.1 Elevator lobby.** An elevator lobby shall be provided at each floor where an elevator shaft enclosure connects more than three stories. The lobby shall separate the elevator shaft enclosure doors from each floor by fire partitions equal to the fire-resistance rating of the corridor and the required opening protection. Elevator lobbies shall have at least one means of egress complying with Chapter 10 and other provisions within this code.

**Exceptions:**

1. Enclosed elevator lobbies are not required at the street floor, provided the entire street floor is equipped with an automatic sprinkler system in accordance with Section 903.3.1.1.
2. Elevators not required to be located in a shaft in accordance with Section 707.2 are not required to have enclosed elevator lobbies.
3. Where additional doors are provided at the hoistway opening in accordance with Section 3002.6. Such doors shall be tested in accordance with UL 1784 without an artificial bottom seal.
4. In other than Group I-3, and buildings having occupied floors located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access, enclosed elevator lobbies are not required where the building is protected by an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
5. Smoke partitions shall be permitted in lieu of fire partitions to separate the elevator lobby at each floor where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
6. When approved, ~~e~~Enclosed elevator lobbies are not required where the elevator hoistway is pressurized in accordance with Section 707.14.2.

**Purpose/Rationale:**

**(N)** The proposed code amendment requires approval by the Building Official in order to apply this exception.

The concept that hoistway pressurization provides an equivalent level of protection to that of an enclosed elevator lobby is contrary to existing building practices established in the State of California. The enclosed elevator lobby has proven to be a reliable system to prevent smoke migration throughout the building via the elevator hoistway. Installation of an elevator lobby provides a reliable physical barrier that is not reliant on the performance of mechanical systems.

**716.5.2 Fire barriers.** Duct and air transfer openings of fire barriers shall be protected with approved fire and smoke dampers installed in accordance with their listing.

**Exceptions:**

1. Fire dampers are not required at penetrations of fire barriers where ~~any of the following apply~~ the
  4. penetrations are tested in accordance with ASTM E119 as part of the fire-resistance-rated assembly.
  2. Fire and smoke dampers are not required where ducts are used as part of an approved smoke control system in accordance with Section 909 and where the use of a fire or smoke damper would interfere with the operation of the smoke control system.
  3. ~~Such walls are penetrated by ducted HVAC systems, have a required fire-resistance rating of 1 hour or less, are in areas of other than Group H and are in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2. For the purposes of this exception, a ducted HVAC system shall be a duct system for conveying supply, return or exhaust air as part of the structure's HVAC system. Such a duct system shall be constructed of sheet steel not less than 26 gage thickness and shall be continuous from the air handling appliance or equipment to the air outlet and inlet terminals.~~

**Purpose/Rationale:**

**(N)** The addition of smoke dampers maintains the current level of protection provided under the UBC. UBC Section 713.10 requires smoke dampers in occupancy separations, horizontal exit walls, and shaft enclosures which are considered to be fire barriers in accordance with Section 706 of the IBC.

Since this Work Group does not have responsibility for specific occupancies, we are distributing this proposed amendment to the other Work Groups that do so they may consider it as it may apply to occupancy separations involving their particular occupancies.

It should also be noted that this proposed amendment would also apply to exit passageways, vertical exit enclosures, incidental use areas, and single occupancy fire areas based on IBC Section 706 Fire Barriers.

Exception 3

Elimination of this exception maintains the current level of protection as provided under the UBC. This deletion would be consistent with the use of, and exceptions to use of, fire dampers in UBC Section 713.11 since Exception 3 to Section 716.5.2 for the requirements for fire dampers does not exist in the current UBC Section 713.11.

## CHAPTER 9

**[F] 907.2.12.1 Automatic fire detection.** Smoke detectors shall be provided in accordance with this section. Smoke detectors shall be connected to an automatic fire alarm system. The activation of any detector required by this section shall operate the emergency voice/alarm communication system. Smoke detectors shall be located as follows:

1. In each mechanical equipment, electrical, transformer, telephone equipment or similar room which is not provided with sprinkler protection, elevator machine rooms and in elevator lobbies.
2. In the main return air and exhaust air plenum of each air-conditioning system having a capacity greater than 2,000 cubic feet per minute (cfm) (0.94 m<sup>3</sup>/s). Such detectors shall be located in a serviceable area downstream of the last duct inlet.

3. At each connection to a vertical duct or riser serving two or more stories from a return air duct or plenum of an air-conditioning system. In Group R-1 and R-2 occupancies a listed smoke detector is allowed to be used in each return air riser carrying not more than 5,000 cfm (2.4 m<sup>3</sup>/s) and serving not more than 10 air inlet openings.

4. For Group R, Division 1 Occupancies in all interior corridors serving as a means of egress for an occupied load of 10 or more.

**Purpose/Rationale:**

**(SFM)** This requirement of Section 403.3 of CBC has not been addressed by the IBC and needs to be carried forward.

## CHAPTER 10

**1017.5 Corridor continuity.** Fire-resistance-rated corridors shall be continuous from the point of entry to an exit, and shall not be interrupted by intervening rooms.

**Exception:** 1. Foyers, lobbies or reception rooms constructed as required for corridors shall not be construed as intervening rooms.

2. In fully sprinklered office buildings, corridors may lead through enclosed elevator lobbies if all areas of the building have access to at least one required exit without passing through the elevator lobby.

**Purpose/Rationale:**

**(N)** The proposed code amendment allows a corridor to pass through an elevator lobby only for office buildings and only when the building is fully sprinklered throughout.

The current exception to the Section 1017.5 implies that a corridor may pass through an elevator lobby without providing the required smoke protection for the elevator hoistway openings.

The proposed exception allows a corridor to pass through an enclosed elevator lobby only if all areas of office buildings have access to at least one required exit without passing through the elevator lobby.

The IBC Section 1017.5 does not address this provision which provides design flexibility for office buildings without adversely affecting fire/life safety.

### **Amendment to Table 1017.1 Corridor Fire-Resistance rating.**

**TABLE 1017.1**  
**CORRIDOR FIRE-RESISTANCE RATING**

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2003 International Building Code  
CHAPTER 10 MEANS OF EGRESS  
SECTION 1016 CORRIDORS  
1016.1 Construction.  
TABLE 1016.1 CORRIDOR FIRE-RESISTANCE RATING

requiring only a single means of egress complying with Section 1014.1.

**TABLE 1016.1  
CORRIDOR FIRE-RESISTANCE RATING**

OCCUPANCY	OCCUPANT LOAD SERVED BY CORRIDOR	REQUIRED FIRE-RESISTANCE RATING (hours)	
		Without sprinkler system	With sprinkler system <sup>c</sup>
H-1, H-2, H-3	All	Not Permitted	1
H-4, H-5	Greater than 30	Not Permitted	1
A, B, E, F, M, S, U	Greater than 30	1	0
R	Greater than 10	1	0.5
I-2 <sup>a</sup> , I-4	All	Not Permitted	0
I-1, I-3	All	Not Permitted	1 <sup>b</sup>

a. For requirements for occupancies in Group I-2, see Section 407.3.  
b. For a reduction in the fire-resistance rating for occupancies in Group I-3, see Section 408.7.  
c. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 where allowed.

**1016.2 Corridor width.**  
The minimum corridor width shall be as determined in Section 1005.1, but not less than 44 inches (1118 mm).

**Exceptions:**

- Twenty-four inches (610 mm)—For access to and utilization of electrical, mechanical or plumbing systems or equipment.
- Thirty-six inches (914 mm)—With a required occupant capacity of 50 or less.

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- For requirements for occupancies in Group I-2, see Section 407.3.
- For a reduction in the fire-resistance rating for occupancies in Group I-3, see Section 408.7.
- Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 where allowed.

*d. The required Fire-Resistance rating shall not be less than 1-hour in buildings required to comply with Section 403.*

**Purpose/Rationale:**

**(N)** The proposed code amendment requires that corridors regulated by Table 1016.1 in High Rise buildings be a minimum of 1 (one) hour fire-resistant construction.

The concept that automatic sprinkler systems provide an equivalent level of protection to that of a fire-resistant corridor is contrary to existing building practices established in the State of California. Fire-resistant corridors have proven to be a reliable system that provides both a protected exit access for tenants and a protected work space allowing fire personnel to effectively perform suppression operations.

The new note “d” applies to “0” for A,B,E,M,S & U occupancies, “0.5” for R occupancy and “0” for I-2, I-4 under the “Required Fire-Resistance rating (hours) / with sprinkler system” column of the Table 1017.1. ( Table 1016.1 of 2003 IBC)

## CHAPTER 30

**[F]3003.2 Fire-fighters' emergency operation.** Elevators shall be provided with Phase I II emergency recall operation and ~~Phase II emergency in-car operation~~ in accordance with ASME A17.1.

**3003.3 – Elevator recall.** *Elevators shall be provided with Phase I emergency recall operation in accordance with ASME A17.1.*

**Purpose/Rationale:**

**(N)** This amendment specifies the need for both elevator recall and emergency in-car operation of the elevator car. The proposed code does not specify the need for elevator recall in high rise buildings and lists the need for elevator recall under the titled section "Fire-fighter's emergency operation". Phase I elevator recall is not a firefighter emergency operation as it is stated. Phase I recall is a life safety feature that prohibits an elevator car from unknowingly opening on a fire floor and aids in keeping additional people from trying to use the elevators as a means of egress. Elevator recall deserves to be listed as a stand alone life safety feature.